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IN THE SPECIFICATION

Please replace paragraph number [0033] as follows:

A cross-section of the array 400 of FIG. 4 taken along 5-5 is shown in FIG. 5 illustrating an actuator array 500 for selectively altering the interfaces 410. The electrohydrodynamic actuator array 500 comprises layers of silicon 504A, 504B and 504C interleaved with layers of glass 506A, 506B and 506C. The capillaries 502A, 502B, 502C and 502D that contain the fluid are formed through layers of silicon and glass. The deformable fluid/air interface 410 is formed at the end of each capillary. To form each actuator within the actuator array 500, silicon layer 504B is grounded and an individual ring electrode 510A, 510B, 510C and 510D are formed around each capillary 502A, 502B, 502C and 502D. Each of the ring electrodes ~~502A, 502B, 502C and 502D~~ 510A, 510B, 510C, and 510D are individually addressable to control the interface 410 at the end of each of the capillaries 502A, 502B, 502C and 502D.

Please replace paragraph number [0042] as follows:

When light traveling through the input optical waveguide 902 strikes the optically active interface 910 through the controllable refractive index gradient of the fluid 912, it is reflected to one of two of the optical output waveguides 904A and 904B. The designation of the target waveguide 904A and 904B is controlled through the controllable refractive index gradient of the fluid 912, as the optically active interface 910 is changed by the incident light 908, the controllable refractive index gradient 912 is affected such that it reflects the input light ~~902~~ 914 into one of the specific optical output ~~waveguide~~ waveguides 904A and 904B, ~~as reflected~~ outputs 914A and 914B. An optically active interface 910 may be, but is not limited to, silicon or some other photo-conductive material. Some examples of fluids having refractive index gradients controllable by an active interface 910 that may be used by the present invention include, but are not limited to, organic solvents such as DMF, Methanol and hydrocarbons and aqueous based solutions.